

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS:

1. (currently amended) A storage device comprising:
a nonvolatile memory; and
a control circuit,
wherein said nonvolatile memory has ~~a plurality of a~~
plurality of memory blocks, each of which has a plurality of
sub memory blocks comprising a plurality of nonvolatile memory
cells, and is capable of performing programming to a first sub
memory block within a first memory block and a second sub
memory block within a second memory block in parallel,
wherein said control circuit controls programming to said
nonvolatile memory in accordance with an address information
and data in accordance with being issued from an outside
device,
wherein said first sub memory block of said first memory
block includes a management area, which is used for storing
[[a]] management information which and includes an area for
storing[[a]] linking information between said first sub memory
block of said first memory block and a corresponding sub
memory block[[s]] of at least one other memory block[[s]],
wherein said control circuit ~~controls that~~
~~reading performs control to read said linking information from~~

said first sub memory block of said first memory block in accordance with said address information, and thereafter to program~~programming to one or more of~~ said first sub memory block of said first memory block in accordance with said address information and to said corresponding sub memory block[[s]] ~~of other memory blocks relating to said first memory block by~~based on said linking information stored in said first sub memory block.

2. (currently amended) A storage device according to claim 1, further comprising a translation table, wherein said translation table is used for translating from said address information issued from said outside device to a first physical address for selecting said first sub memory block of said first memory block, and wherein said control circuit reads said linking information from said first sub memory block of said first memory block selected by said first physical address translated by said translation table from said address information.

3. (currently amended) A storage device according to claim 2, further comprising a buffer memory, wherein said buffer memory is capable of storing data supplied from or supplying~~supplied~~ to said outside device, and

wherein said translation table is ~~storing~~stored to said nonvolatile memory ~~when~~before power supplying is turned off, and is ~~storing~~stored to said buffer memory ~~when~~after power supplying is turned on.

4. (currently amended) A storage device according to claim 3,

wherein said nonvolatile memory cells ~~including~~said in ~~first~~ sub memory block[[s]] are coupled to a word line, and

wherein said selecting of said first sub memory block ~~is~~includes selecting said word line corresponding to said physical address.

5. (currently amended) A storage device according to claim 4,

wherein when said control circuit detects ~~existing~~ an error ~~in~~ a nonvolatile memory cell in a ~~third~~selected sub memory block ~~related~~corresponding to ~~by~~ ~~said linking information in~~ said first sub memory block, said control circuit controls changing ~~said linking information replacing~~ said selected sub memory block ~~said third sub memory block~~ to a ~~forth~~different sub memory block in the same memory block and storing linking information of said different sub memory block into said first sub memory block.

6. (currently amended) A storage device according to
claim 5,

wherein in said programming to said first sub memory
block, said control circuit controls reading data from said
first sub memory block, merging data read from said first sub
memory block and new data received from said outside device,
and programming to a new first sub memory block[[,]] a second
physical address [[of]] which is different from said first
physical address of said first sub memory block.

7. (currently amended) A storage device according to
claim 6,

wherein said control circuit controls changing said
translation table replacing to replace said first physical
address of said first sub memory block ~~to~~ by said second
physical address of said new first sub memory block as a
corresponding physical address of said address information
received from said outside device, after programming to said
new first sub memory block.

8. (currently amended) A storage device according to
claim 7,

wherein said management information includes a first
information which indicates, ~~that~~ for each ~~of~~ said first sub
memory block and each said corresponding sub memory block[[s]]
~~of other memory blocks relating to said first memory block by~~

said linking information, whether the sub memory block is
already erased or not.

9. (currently amended) A storage device according to
claim 8, further comprising a plurality of volatile memories,
wherein each of said volatile memories ~~is corresponding~~
corresponds to each one of said memory blocks and is capable
of storing program data.

10. (original) A storage device according to claim 9,
wherein in said programming to said first sub memory
block, said control device controls reading data from said
first sub memory block to said volatile memory corresponding
to said first memory block.